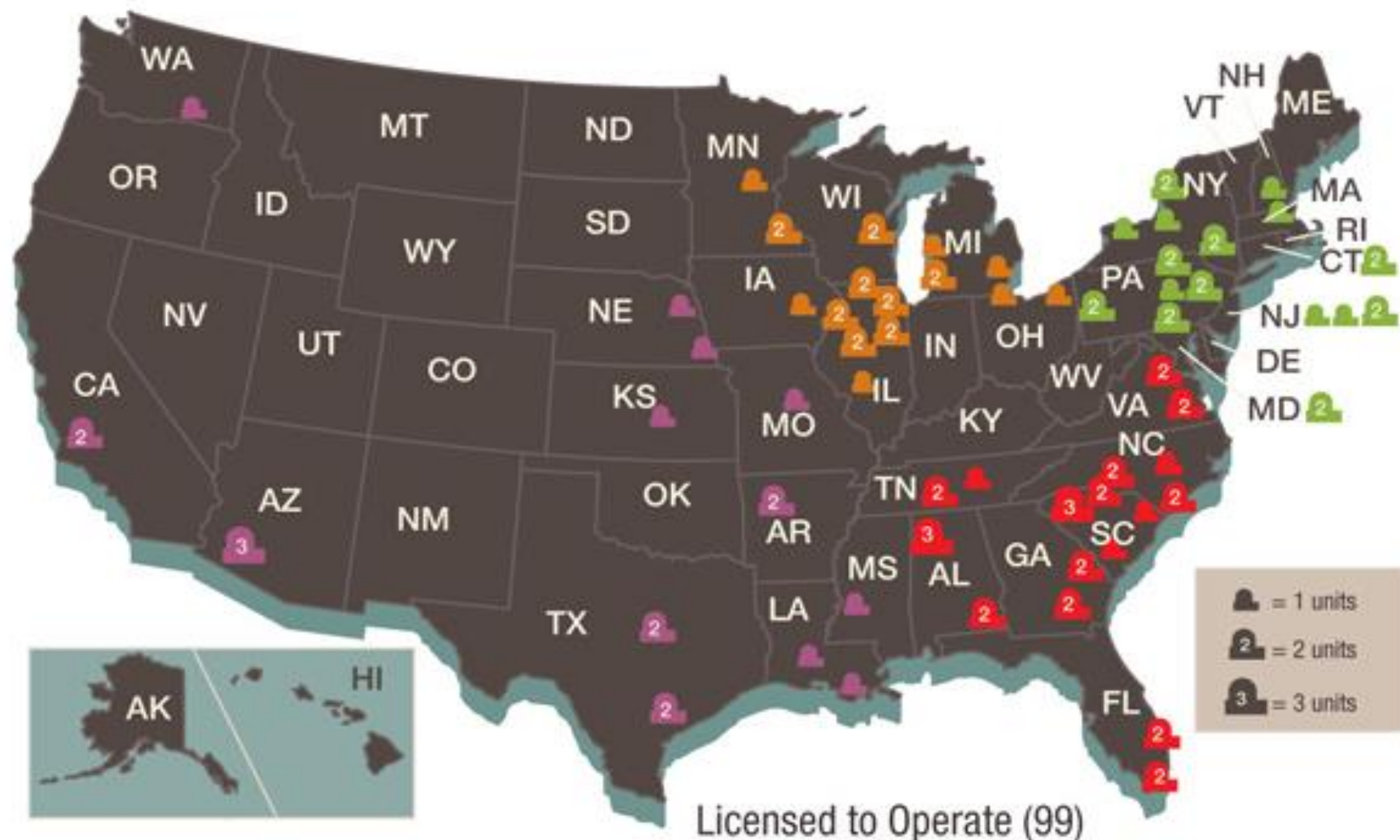


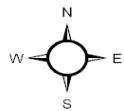
Iowa Department of Homeland Security and Emergency Management

Radiological Emergency Preparedness
(REP) Program

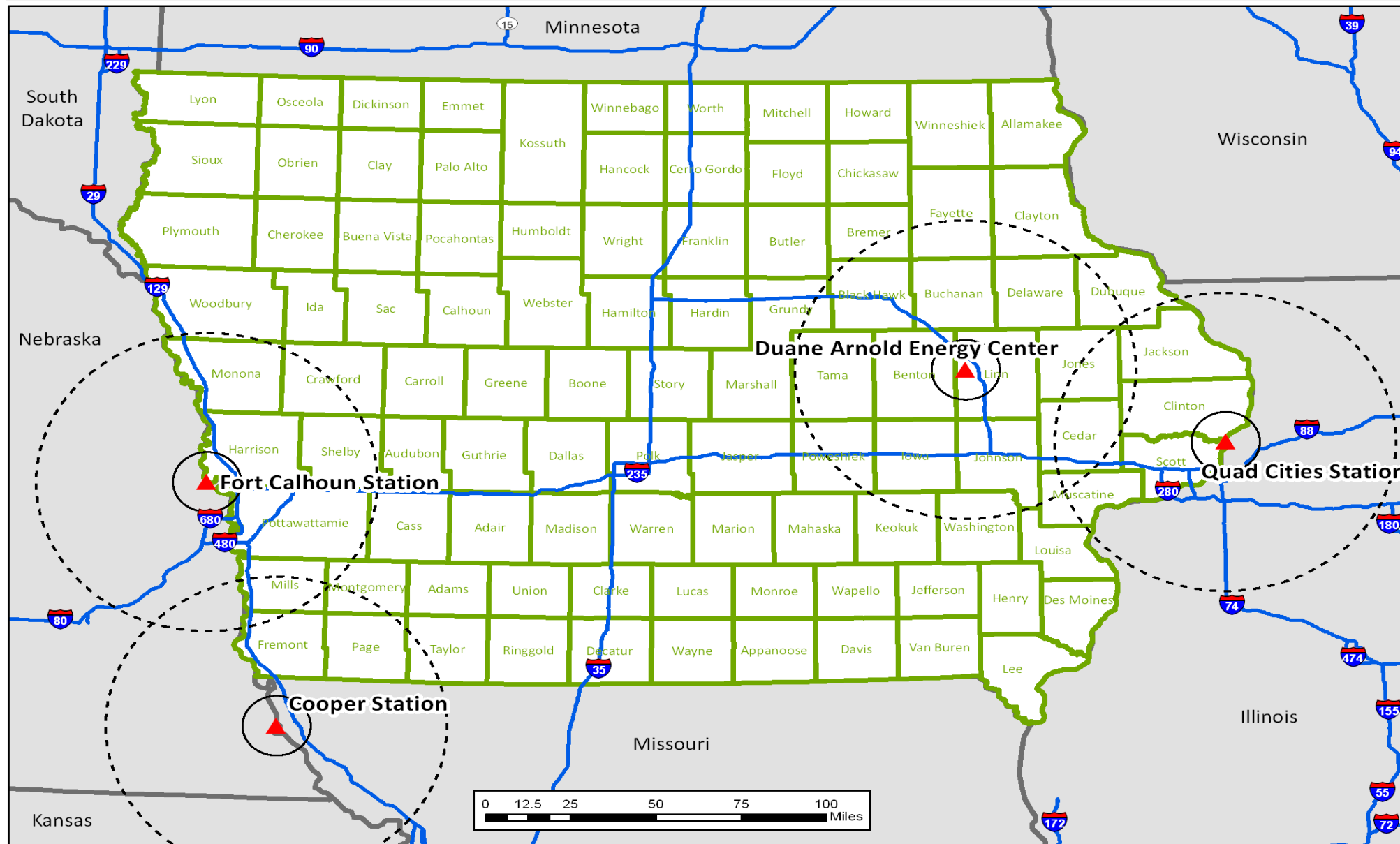


U.S. Operating Commercial Nuclear Power Reactors

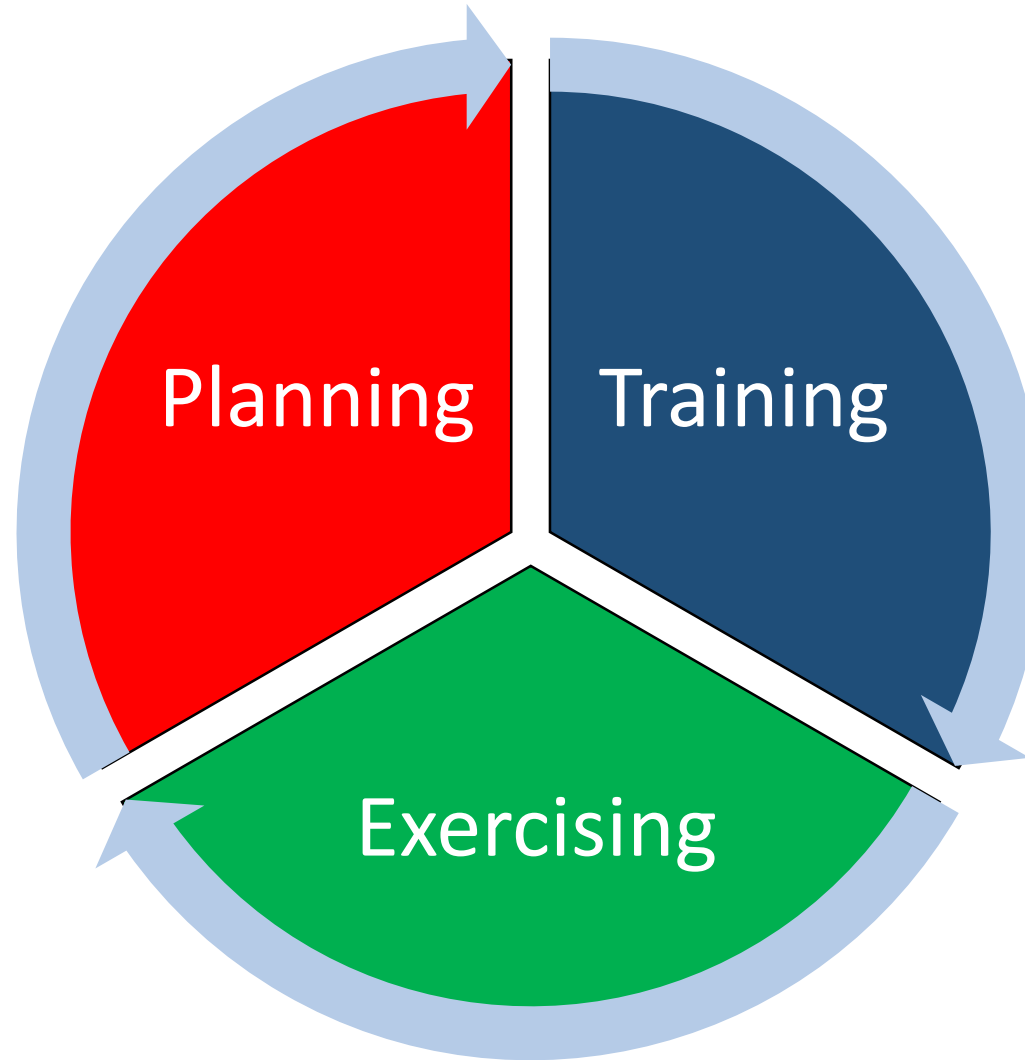




Nuclear Power Plants Impacting Iowa



TENANTS OF THE REP PROGRAM

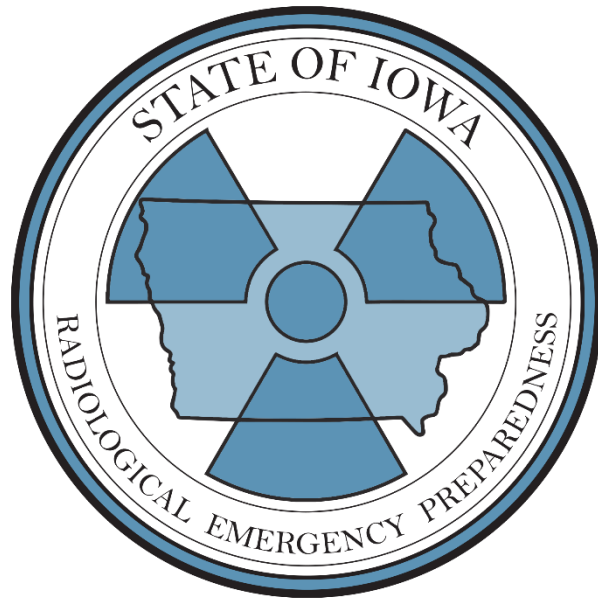


The REP Program

- **Four** full-time state staff
 - Site specialist model
 - State, local and private sector partnership
- **Twelve** distinct, integrated radiological response plans reviewed and approved annually
- Approximately **2,000 responders** trained each year
- Equipment calibration, testing, and maintenance performed on over **4,800 units** annually
- Minimum of **twelve to fourteen exercises** conducted each year



State of Iowa Radiological Emergency Response Plan



**Iowa Department of Homeland Security and Emergency Management
Mark Schouten
Homeland Security Advisor and
Emergency Management Director**

Classifying An Emergency

- Criteria established by the Nuclear Regulatory Commission (NRC)
- Four Levels - Unusual Event, Alert, Site Area Emergency, General Emergency
- Level of classification drives off-site response activities and decision-making on behalf of public health & safety

Emergency Classification Levels

Unusual Event

No threat to public safety
Increased Awareness

Alert

No threat to public safety
Precautionary mobilization of
response organizations

Site Area Emergency

Full response activation
Precautionary actions for high
risk populations

General Emergency

Public Safety threatened
Protective actions for the
general public

Notification To The Public

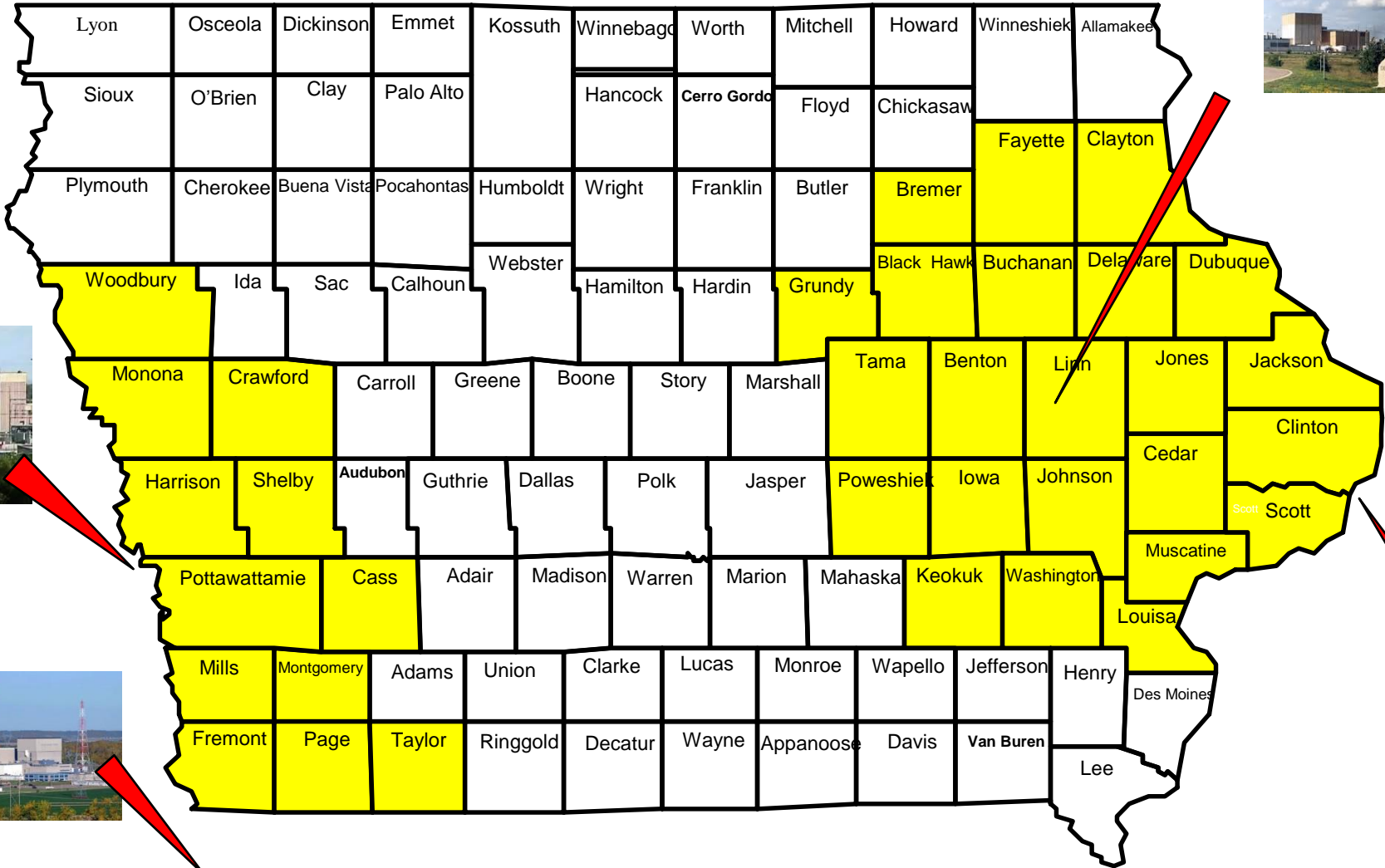
- Sirens
- Emergency Alert System
- Other Public Notification Systems
- National Weather Service
- Joint Information Center



Implementation of Protective Actions

- Agricultural Recommendations → Dairy Animals on stored feed/water
- Special Population Considerations → Schools/Nursing Homes
- Sheltering → Staying indoors
- Evacuation → Locate outside the affected area
- Return → Re-occupation of an area
- Re-Entry → Temporary entry under controls
- Relocation → Removal/Exclusion

Iowa Ingestion Pathway Counties

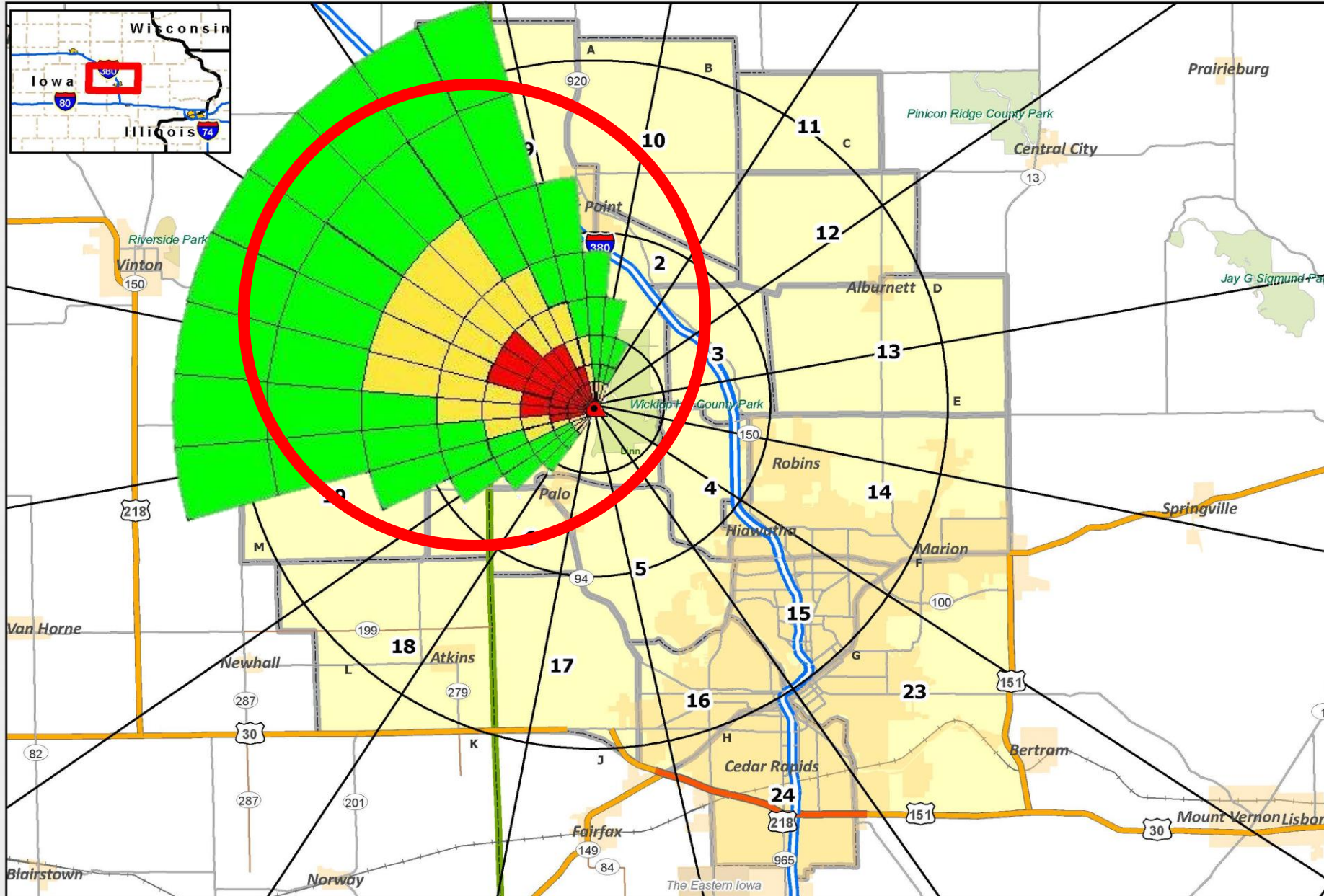




Projection:
NAD 1983 UTM Zone 15N
Transverse Mercator

DUANE ARNOLD ENERGY CENTER PLUME EXPOSURE 10 MILE EPZ

0 1.25 2.5 5 7.5 10 Miles

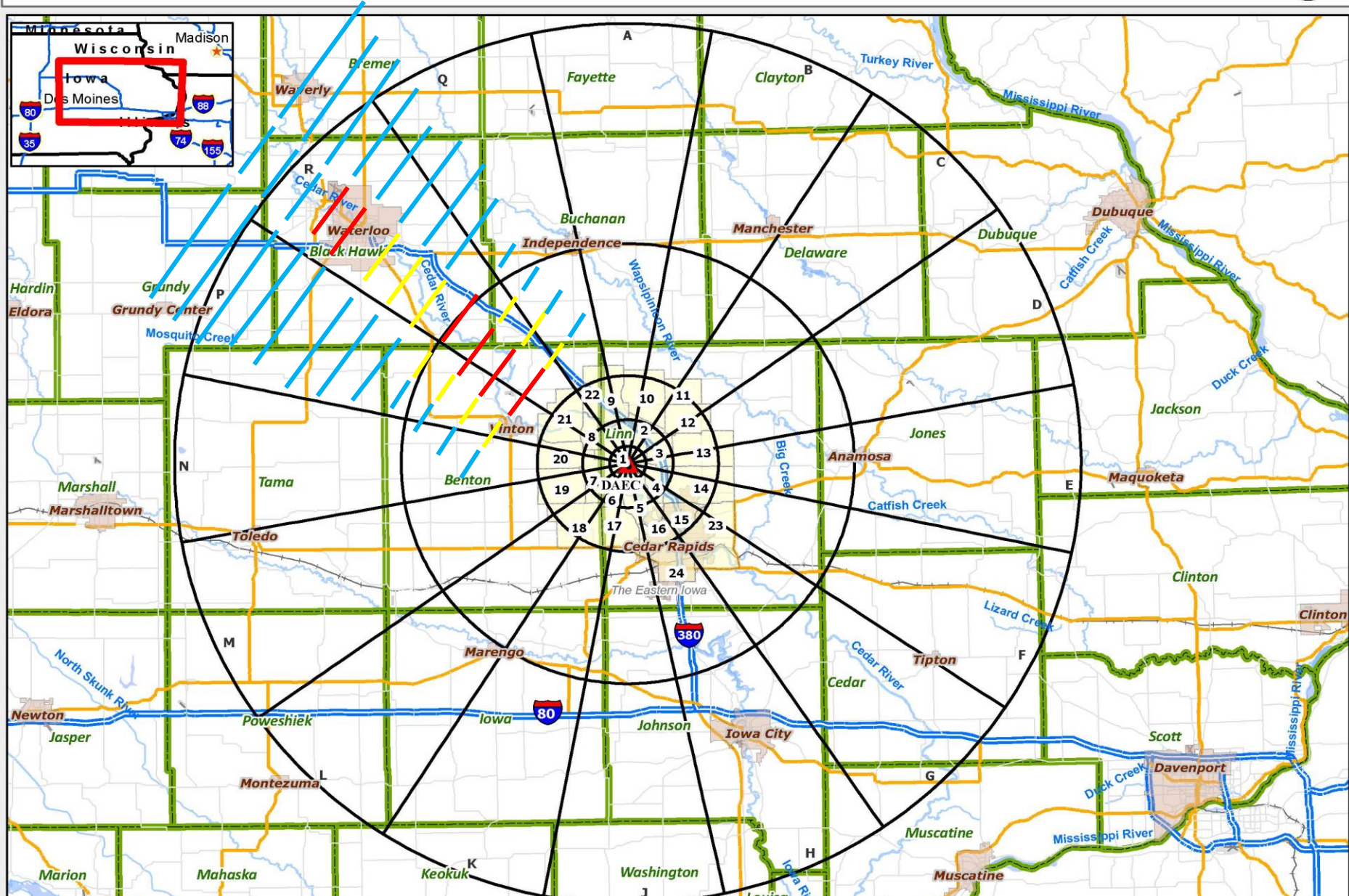




Projection:
NAD 1983 UTM Zone 15N
Transverse Mercator

DUANE ARNOLD ENERGY CENTER INGESTION PATHWAY ZONE

0 4 8 16 24 32 Miles



Ingestion Considerations

- Identify the land area possibility contaminated
- Develop and implement a radiological monitoring and sampling plan
- Perform laboratory analysis of samples
- Calculate exposures from various pathway (milk, water, food)
- Select and implement additional protective actions

Ingestion Pathway Emergency Protective Actions

- Wear a protective mask when working outside
- Wear outer clothing to protect skin exposure
- Remove outer clothing before going indoors
- Wash hands before handling food
- Remove dairy animals from pasture, shelter them and place on protected feed/water
- Do not engage in cultivating, disking, or harvesting
- Restrict fishing to catch and release
- Delay slaughter of animals

Recovery

- Radiological assessment of food and water
- Decontamination activities
- Disposal of radioactive water
- Restoration of public services
- Control of access to contaminated areas
- Security within contaminated areas
- Establishment of long-term radiological monitoring
- Medical follow-up for the potentially contaminated
- Establishment of social/human service programs

STATE OF IOWA RADIOLOGICAL EMERGENCY INFORMATION

**FOR FARMERS, FOOD PROCESSORS, AND
DISTRIBUTORS**



**IMPORTANT INFORMATION
PLEASE READ AND SAVE THIS BROCHURE
January 2014**

- This brochure provides emergency information for Iowa farmers, food processors and food distributors located within 50 miles of a commercial nuclear power plant.
- Objective to prevent or minimize radiation contamination of food and food products
- Distributed through Iowa State Extension and Outreach

What you need to know about.....

Notification

Formal notice following
General Emergency

Via Telephone, Alert Iowa,
etc.

What you need to know about.....

Notification

Formal notice following
General Emergency

Via Telephone, Alert Iowa,
etc.

Coordination

Daily conference calls with
partners

Assistance with access for
sampling activities

Public Information Messaging

What you need to know about.....

Notification

Formal notice following
General Emergency

Via Telephone, Alert Iowa,
etc.

Coordination

Daily conference calls with
partners

Assistance with access for
sampling activities

Resources

Federal and State sampling
teams and radiological
experts

State agency assistance
(Governors Proclamation)

Public Information

What you DO NOT need to worry about.....



Evacuation/Sheltering

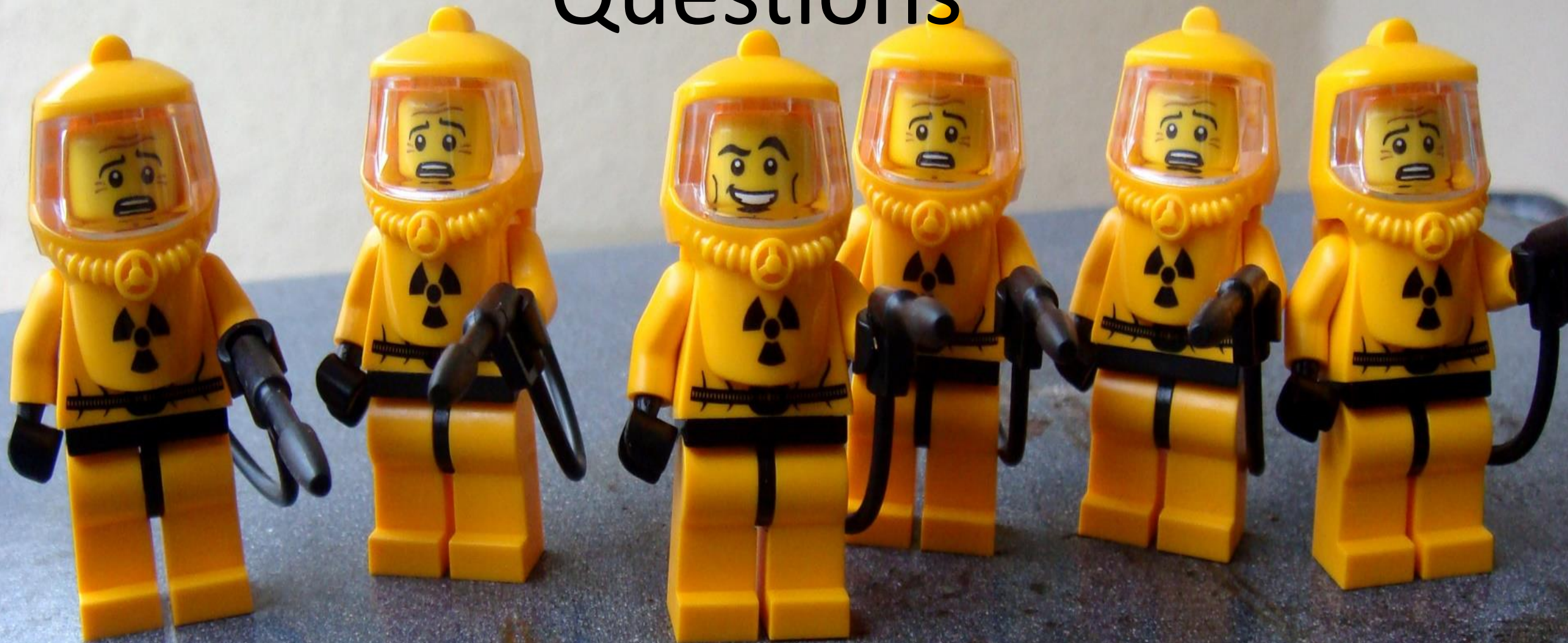


Dosimetry and/or
Potassium Iodide (KI)



Immediate or direct
threat to public health
and safety

Questions



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